VERIS™

Media Components

Quiet computing™

Fusion 430 /Fusion Black 430

User's Manual

Manuel de l'utilisateur

Anwenderhandbuch

Manuale per l'operatore

Manual del usuario

取扱説明書

Antec®

The Power of You

At Antec, we continually refine and improve our products to ensure the highest quality. As such, it's possible that your new case may differ slightly from the description in this manual. This isn't a problem; it's simply an improvement. As of the date of publication, all features, descriptions, and illustrations in this manual are correct.

Disclaimer

This manual is intended only as a guide for Antec's Computer Enclosures. For more comprehensive instructions on installing the motherboard and peripherals, please refer to the user's manuals that come with those components.

Fusion 430 / Fusion Black 430 User's Manual

Fusion 430 / Fusion Black 430 – Media Center Case

The Power Supply

The Fusion 430 and Fusion Black 430 come with a 430 Watt high efficiency power supply, compliant with the ATX12V version 2.01 specification. This power supply features Universal Input, Active PFC, a single 80mm fan, and dual 12V output rails that deliver safer and more reliable output to your system's components.
In addition, it features a variety of industrial-grade protection circuitry: OPP (over power protection), OVP (over voltage protection), UVP (Under Voltage Protection), and SCP (Short Circuit Protection).

Turn the switch to the ON (I) position before you boot up the computer for the first time. Normally, you won't need to switch to the OFF (O) position, since the power supply includes a soft on/off feature which lets you turn the computer on and off by using the soft switch on the computer case. If the computer crashes and you can't shut it down using the soft switch, you can switch the main power of the power supply to the OFF (O) position to clear the fault, then reboot.

This power supply features Power Factor Correction (PFC) circuitry in accordance with European standard regulation code EN61000-3-2. By altering the input current wave shape, PFC improves the power factor of the power supply. This yields increased energy efficiency, reduced heat loss, prolonged life for power distribution and consumption equipment, and improved output voltage stability.

Although care has been taken to prevent sharp edges in your Antec case, we strongly recommend taking the appropriate time and care when working with it. Avoid hurried or careless motions and the use of excessive force.
Please use reasonable precaution.

Setting Up

1. Place the case upright on a flat, stable surface.
2. Remove the thumbscrew from the back of the top panel. Slide the panel towards the rear to remove it from the case.
3. Inside the case you should see the power supply, some wiring with marked connectors (USB, PWR etc.), an installed I/O panel and a power cord.

The Triple Chamber structure

Upon opening the top panel, you will find that the case is divided into three chambers – the power supply chamber, the motherboard chamber and the HDD chamber. This triple chamber structure isolates the heat and noise within each chamber, resulting in much quieter and cooler operation than a traditional desktop case design.

Installing the Motherboard

This manual does not cover CPU, RAM, or expansion card installation.
Please consult your motherboard manual for specific mounting instructions and troubleshooting.

The motherboard is located inside the main chamber with two 120mm TriCool™ fans preinstalled at the side of the case next to the CPU for effective CPU cooling.

1. Lay the case down, with the top open. The drive chamber and power supply should be visible.
2. Make sure you have the correct I/O panel for your motherboard. If the panel provided with the case isn't suitable, please contact your motherboard manufacturer for the correct I/O panel.
3. Line up your motherboard with the standoff holes, and remember which holes are lined up. Not all motherboards will match with all the provided holes; this is normal and won't affect functionally.
4. Remove your motherboard by lifting it up.
5. Screw the brass standoffs into the threaded holes that line up with your motherboard. Do not over-tighten the standoffs. Some standoffs may be pre-installed for your convenience.
6. Place your motherboard on the brass standoffs.
7. Screw in your motherboard to the standoffs with the provided Philips-head screws. Your motherboard is now installed.

Connecting the Power and LED

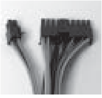
The power supply conforms to the ATX12V Version 2.01 standard and is backwards compatible with most previous ATX12V form factor motherboards. Before you connect the power supply to any of your devices, please consult the appropriate user manuals for your motherboard and other peripherals.
Note: This power supply does not provide a –5V line as no modern motherboards compliant with the ATX12V v2.0 standard and above require –5V power. Please be forewarned that if your motherboard requires -5V power that this power supply might not be compatible.

1. Connect the 24-pin Main Power Connector and the 4-pin or 8-pin 12V connector to the motherboard as needed. If the motherboard uses a 20-pin connector, detach the 4-pin attachment on the 24-pin power connector (see pictures 1 and 2).
   Note: the detachable 4-pin section cannot be used in place of a 4-pin +12V connector.

Picture 1

For 24-pin motherboards

Picture 2



For 20-pin motherboards

2. Connect the Reset switch (labeled RESET SW) to the motherboard at the RST connector. Polarity (positive and negative) does not matter for switches.
3. The Power Switch (labeled POWER SW) connects to the PWR connector on the motherboard.
4. The Power LED (labeled POWER LED) connector is located behind the Reset connector. For LEDs, colored wires are positive (+). White or black wires are negative (–). If the LED does not light up when the system is powered on, try

reversing the connection. For more info on connecting LEDs to your motherboard, see your motherboard manual.

5. The Hard Drive LED (labeled HDD LED) connects to the hard drive activity header.

Power Supply 3-Pin Fan Signal Connector

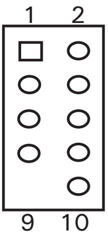
A three-pin fan signal connector with blue and black wires is available to connect the power supply to one of your motherboard's fan connectors (**Note**: Some motherboards have a dedicated fan connector labeled PWR_FAN or PSU_FAN that is specifically for the power supply). This connector is for monitoring the power supply's fan speed only. It is optional. The power supply and its fan will operate normally whether this cable is connected to your motherboard or not.

The fan speed can be monitored through the BIOS or special monitoring software that came with your motherboard. To ensure proper monitoring of the power supply fan, please check your motherboard manual.
Note: At low temperatures, the fan may run as slow as 750 RPM (±10%). At these speeds, some motherboards may not properly detect the fan speed and may generate false warnings of fan failure.

Connecting the USB Ports

You will find a single 10-pin connector on a cable attached to the front USB ports. This is an Intel® standard connector that is keyed so that it can't be accidentally reversed when connected to a proper Intel® standard motherboard header. Connect the 10-pin connector to the motherboard headers so that the blocked pin fits over the missing header pin.
Note: Please check the motherboard manual for the USB header pin layout and make sure it matches the table below. If it does not match this Intel® standard, please visit Antec's web store at http://www.antec.com/StoreFront.bok and search for part number 30095 to order a USB Internal Adapter Cable. This adapter will allow you to connect the front USB to your motherboard on a pin-by-pin basis.

Motherboard USB Pin Layout



Pin	Signal Names	Pin	Signal Names
1	USB Power 1	2	USB Power 2
3	Negative Signal 1	4	Negative Signal 2
5	Positive Signal 1	6	Positive Signal 2
7	Ground 1	8	Ground 2
9	Key (No Connection)	10	Empty Pin

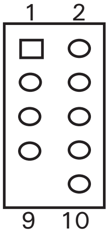
Connecting the IEEE 1394 (FireWire®, i.Link®) Port

You will find a single 10-pin connector on a cable attached to the front IEEE 1394 connection. This is an Intel® standard connector that is keyed so that it can't be accidentally reversed when connected to a proper Intel® standard motherboard header. Connect the 10-pin connector to the motherboard header so that the blocked pin fits over the missing header pin.

Note: Please check the motherboard manual for your IEEE 1394 header pin layout and make sure it matches the table below. If you intend to connect the front

FireWire port to an IEEE 1394 add-on card that comes with an external-type IEEE 1394 connector, you will need a FireWire Internal Adapter. To order one, please visit Antec's web store at http://www.antec.com/StoreFront.bok and search for part number 30031. This adapter will allow you to connect the front IEEE 1394 port to the external-type connector.

Pin Assignment for Front Panel IEEE 1394 Connector

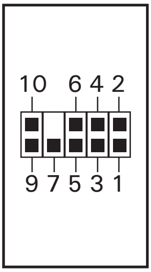


Pin	Signal Names	Pin	Signal Names
1	TPA+	2	TPA–
3	Ground	4	Ground
5	TPB+	6	TPB–
7	+12V (Fused)	8	+12V (Fused)
9	Key (No Pin)	10	Ground

Connecting the Audio Ports (AC' 97 and HDA)

There is an Intel® standard 10-pin AC' 97 connector and an Intel® 10-pin HDA (High Definition Audio) connector, either of which can be connected to your motherboard depending on the spec of the motherboard.

Pin Assignment for Audio Ports (HDA and AC'97)



Pin	Signal Names (HDA)	Pin	Signal Names (AC'97)
1	MIC2 L	1	MIC In
2	AGND	2	GND
3	MIC2 R	3	MIC Power
4	AVCC	4	NC
5	FRO-R	5	Line Out (R)
6	MIC2_JD	6	Line Out (R)
7	F_IO_SEN	7	NC
8	Key (no pin)	8	Key (no pin)
9	FRO-L	9	Line Out (L)
10	LINE2_JD	10	Line Out (L)

Locate the internal audio connectors from your motherboard or sound card. Consult your motherboard or sound card manual for the pin-out positions.

The Display/Volume Control

Fusion 430 comes with a Vacuum Fluorescent Display (VFD) and Fusion Black 430 comes with a Liquid Crystal Display (LCD) Display. Both come with a built-in MCE-compatible IR receiver, and a volume control to work with your media center computer. **Note:** These VFD and LCD displays are intended to be compatible with Microsoft MCE / Vista. The basic features include: System Information, Media Information, E-mail check, Daily news, City information (weather report), and graphic equalizer. The IR remote control is not included.

1. Make sure the power supply is off and unplugged before installing any hardware.
2. Connect the 3-pin power cable from the display to the 3-pin connector on the 24-pin ATX main power connector of the power supply. **Note**: If you choose to swap the included power supply with another power supply, please call Antec Customer Service to purchase a special 24-pin Extender with the 3-pin connector to power the display.
3. The display comes with a 4-pin internal USB adapter (see picture 3) and a standard external USB connector. To power the display, either:

Picture 3

   a) Connect the external connector to a standard USB port, or
   b) Check your motherboard USB header pin layout. Match the internal adapter to your motherboard header. Plug the internal adapter into the external connector and plug it in to your motherboard's USB header.
4. Plug in your power supply and turn it on.
5. Boot up your computer.
6. Insert the provided driver CD into your optical drive and install the included software.
7. Restart after the driver has been installed.

Hard disk Drive Installation

There is a hard disk drive bracket with soft silicone grommets inside the HDD chamber. It can hold two hard drives.

1. Remove the HDD bracket from the chamber by removing the two screws on top of it.
2. Mount the left side of your hard drives (as viewed from the front of the hard drive) onto the drive bracket through the top silicone grommets with the special screws provided (see picture 4).
   Note: Do not over-tighten the screws as this will reduce the vibration and noise-dampening ability of the silicone grommets. Always mount the HDD with the thicker side of the silicone grommets facing the hard drive.

Picture 4

3. Drop the HDD/bracket assembly back into the case. Each hard drive should rest on two soft silicone grommets preinstalled at the bottom of the case.
4. Fasten the bracket using the screws provided.
5. Connect 4-pin molex or SATA power connectors on the power supply to the power connectors on each of the devices.

5.25" Device Installation

This case comes with one 5.25" external drive bay right under the VFD.

1. Remove the flip-up drive cage.
2. Insert the 5.25" device into the lower 5.25" drive bay of the cage. Make sure to use the rear set of screw holes on the cage to mount the device. Fasten the drive with the screws included.
   Note: The upper 5.25" drive bay is reserved for VFD. Do not mount any device into this bay.

3. Find a 4-pin molex or SATA connector on the power supply and connect it to the power connector on the device.

Cooling System

The 120mm TriCool™ fans

The Fusion 430 comes with two 120mm TriCool™ fans preinstalled at the side of the case inside the motherboard chamber. These two fans are preinstalled at the side of the case next to the CPU for effective CPU cooling and have a three-speed switch that allows you choose between quiet, performance, or maximum cooling (Please see specifications below). The fans are installed so that the air is blowing out of the case. Connect 4-pin connectors from the power supply to the 4-pin connector on the fans.

Note: The minimum voltage to start the fan is 5V. We recommend our users to set the fan speed to High if you choose to connect the fan to a fan control device. A fan-controller regulates the fan speed by varying the voltage to it. The voltage may start as low as 4.5V to 5V. Connecting a TriCool™ fan set on Medium or Low to a fan-control device may result in the fan not being able to start.

Specifications:

Size: 120 x 120 x 25.4mm TriCool™ Fan
Rated Voltage: DC 12V
Operating Voltage: 10.2V ~ 13.8V

Speed	Input Current	Air Flow	Static Pressure	Acoustical Noise	Input Power
High 2000 RPM	0.24A (Max.)	2.24 m³ / min (79 CFM)	2.54 mm-H_2O (0.10 inch-H_2O)	30 dBA	2.9 W
Medium 1600 RPM	0.2A	1.59 m³ / min (56 CFM)	1.53 mm-H_2O (0.06 inch-H_2O)	28 dBA	2.4 W
Low 1200 RPM	0.13A	1.1 m³ / min (39 CFM)	0.92 mm-H_2O (0.04 inch-H_2O)	25 dBA	1.6 W

The Bottom Air Intake

There are intake vents at the bottom of the case right under the HDD chamber. Cool air will flow into the vents through the hard drives, and then flow into the motherboard chamber and exhaust by the two 120mm TriCool™ fans.

Note: Do not place the Fusion v2 on a soft surface or over anything that will block the bottom air vents.

The Upper Air Intake

There are vents on the top panel above the PCI expansion slot. Cool air will flow through it into the motherboard chamber to cool the VGA card.

Note: Do not place anything on top of the Fusion 430 that will block the top air vents.

The Rear Air Intake

There are vents right above the rear I/O panel and on the PCI expansion slot covers to bring in cool air to the CPU and VGA card.

CPU Air Guide

When used with the CPU Air Guide, fresh air from the rear air intake can be directed to the CPU cooler to enhance the CPU cooling. The CPU Air Guide can be adjusted by adding or removing stacking sections to best suit different motherboard CPU positions.

The Power Supply Air Intake

There are vents on the left side of the case to bring cool air into the power supply chamber to cool the power supply.
Note: Please leave at least 1" (2.5cm) between the left side of the case and anything that could block airflow to the power supply. This is required in order for the power supply will have sufficient cooling.

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